Straumann® CARES®

On 3Shape

General Information

Version 10.0

December 2022

Contents

3Shape connectivity

1 Customer registration

Customer registration is necessary for the communication with Straumann and order administration. This ensures that all aspects of an order such as delivery documents and invoices are prepared correctly. As a new Straumann customer, you will receive a Straumann SAP customer number from your local Straumann subsidiary. Please contact your sales representative or your local Straumann subsidiary to perform this registration.

As a customer - to get access to Straumann manufactured prosthetics some Straumann specific data have to be placed into the 3Shape software internal registration.

For customer registration, following information is needed:

- Contact data: Name of Dental Lab and contact person
- System ID of 3shape System
- Straumann SAP customer number
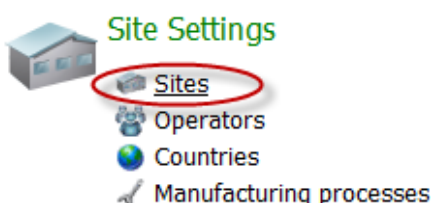
The shipping address can be different from the customer address. Both customer and shipping address must be in the same country. For consistency reasons and to guarantee seamless shipping please fill in your Dental lab address with the same format.

1.1 How to define the contact settings:

1. Open 3Shape Dental System Control Panel

2. Select „Sites" under section „Tools"

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3. Chose your Lab Site ID (in bold printed Lab) and configure the contact settings:

Options within the order mask (ship to different address):

1.2 Installation of the Straumann DME library

The customer can download a DME library from Straumann (see Section 2.0) to define the interface to the Straumann milling center. This DME library is developed and validated by 3Shape and Straumann.

Please carry out the following steps to install the Straumann DME library file:

1. Open 3Shape Dental System Control Panel

2. Select "Import/Export" under section "Tools"

3. Click on "Import materials" to open a stored DME library file
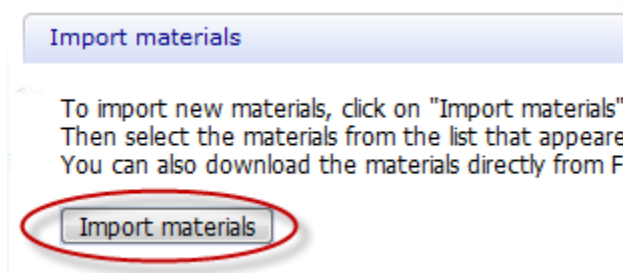
4. Select the stored Straumann DME library file that has been downloaded onto your PC to import the library

2 Using and Ordering Straumann Materials

To use and order Straumann materials the core 3Shape software and Abutment Designer is required (2022 version 22.1.0 is recommended, but users are recommended always to use the latest release).

Please check the Straumann site for new DMEs for material and indication.

[Connectivity Dental Implant & Prosthetic CADCAM Design Library (straumann.com)](straumann.com)

Each of the Straumann materials with its indications has an IFU that can be obtained directly from the Straumann IFU site:

ifu.straumann.com/

2.1 Cautions and Advice

2.1.1 Scanner Source

The source of scanned data and preparation of the tooth model are critical for the quality of the interface to the restoration. Ensure that the scanned data correctly represents the patient situation in order to avoid the need for later filing and fitting tasks that may also reduce the strength of the restoration.

Only products designed from scans made by 3Shape Scanners are approved by Straumann and where appropriate get the Straumann guarantee.

2.1.2 Blank size

Maximum blank sizes for manufacture in Straumann disk materials are not shown during the restoration design. If a design is bigger than the maximum blank size then the order cannot be manufactured and must be adjusted before resending. The maximum heights of Straumann disk blanks for each material are:

n!ce Zirconia LT Mono	15,35 mm
n!ce Zirconia HT Mono	23,35 mm
n!ce Zirconia HT Multi	23,35 mm
n!ce Zirconia XT Multi	19,35 mm
zerion LT Straumann	15,35 mm
zerion UTML Straumann	17,14 mm
zerion HTML Straumann	17,40 mm
3M™ Lava™ Esthetic Straumann	16,86 mm
3M™ Lava™ Plus Straumann	23,21 mm
Sakura ML Straumann (Japan only)	23,27 mm
Sakura ML Gradation Straumann (Japan only)	19,27 mm
Sakura MC Straumann (Japan only)	23,27 mm
n!ce Cobalt-Chromium	17,4 mm
n!ce Titanium	14,9 mm
n!ce Titanium for Implant Bridge (Ti-Base)	19,65 mm
n!ce PMMA	28,60 mm
VITA CAD-Temp monoColor Straumann	19,20 mm
VITA CAD-Temp multiColor Straumann	17,20 mm
JUVORA™ PEEK Straumann	19,21 mm

2.1.3 Limitations:

- Design of indications that are not included in the above list may result in a restoration of insufficient strength and it is possible that the order cannot be manufactured
- Detailed information regarding materials and indications can be found on the website ifu.straumann.com or download Straumann CARES® Guide for iPhone via Apple App Store
- The following indications and materials are not supported. An order of any of these should **not** be made as these may not satisfy patient requirements, and will be solely the responsibility of the dental professionals:

  - Telescopic crown
  - Post core
  - Attachments
  - Crowns and copings with a hole

- With Straumann Mono Scanbodies, the screw-hole needs to be closed (e.g. with wax) to improve the ease of scanning

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2.1.4 Indications and Materials

Overview of 3Shape indications combined with Straumann material which can be send to the Straumann milling facility - the indications permitted depend on the material type:

Indication \ Material	n!ce Zirconia LT Mono *3, 7, 11*	n!ce Zirconia HT Mono *3, 7, 11*	n!ce Zirconia HT Multi *3, 7, 11*	n!ce Zirconia XT Mono *3, 7, 11*	zerion LT Straumann	zerion HTML Straumann *5,9*	zerion UTML Straumann *5,10*	3M™ Lava™ Esthetic Straumann *10*	3M™ Lava™ Plus Straumann *4,9*	n!ce Glass-Ceramic LT/HT *7*	Straumann Ivoclar IPS e.max LT/HT	n!ce Cobalt-Chromium	n!ce Titanium	n!ce PMMA	VITA CAD-Temp monoColor /multiColor	Straumann JUVORA™ PEEK
Tooth borne																
Crown	x	x	x	x	x	x	x	x	x	x^8	x	x	x	x	x	x
Crown pontic	x	x	x	x	x	x	x	x	x			x	x	x	x	x
Inlay / Onlay	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Veneer	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Coping	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Frame pontic	x	x	x	x	x	x	x	x	x			x	x	x	x	x
Standard bridge	x	x	x	x	x	x	x	x	x			x	x	x	x	x
Undercut bridge[1]	x	x	x	x	x	x	x	x	x			x	x	x	x	x

1 Undercut Bridge: One individual crown can have an insertion axis tilting of up to 9 degrees
2 Direct Veneerable Abutment
3 Not available for US market
4 Bridge Limited to a maximum of 5 units in JPN
5 no pre-nesting, only 18mm blank height
7 Not available for JPN market
8 in CAN front teeth and canines only
9 Limited to 6 units and 2 consecutive pontics in CAN
10 Limited to 3 units up to premolar
11 Not availbale for CAN market

For SRBB indications, guidance and availability see:
- http://www.straumann.com/content/dam/sites/straumann/xy/dental-professionals/documents/cares-3rd-party-systems/3shape_SRBB_Design_Guide_EN.pdf
- http://www.straumann.com/content/dam/sites/straumann/xy/dental-professionals/documents/cares-3rd-party-systems/3shape_SRBB_products.pdf

2.1.5 Cautions

- **Minimum and Maximum Dimension Controls**
  Straumann has developed and tested the limits of dimensions of features in the prosthesis type. These dimensions are controlled through use of normal design tools in the Dental Designer software. Some of the limits can be exceeded or undershot through use of design tool combinations, when this occurs the prosthesis may not have sufficient strength or may not be manufacturable.
  Do not decrease cross-sections using wax knives or increase lengths using material addition, when a limit has already been reached with geometry "handles" or other tools.

- **Margin thickness:**
  Do not decrease the default minimum margin thickness values, the prosthetic may not be strong enough

- **Drill compensation:**
  Do not alter the default drill compensation values. Altering these could have a negative effect on the milled restoration's fit.

- **Number of pontics:**
  Do limit the number of pontics please see **ifu.straumann.com** for the recommended maximum number of pontics in front and side areas of mouth.

- **Abutments should always have a hole:**
  Do not block the hole or the order cannot be made.

- **Cross-section of pontics:**
  Do not make a pontic area smaller than the minimum connector cross-section area.

- **Attachment types:**
  Do not use attachments or holes with Straumann materials as they may not be manufactured.

- **Glass ceramic indications:**
  Please be aware that all glass ceramic indications (crown, inlay, veneer, two-piece abutment) are customized devices and will be delivered without CE marking.
  Furthermore it is **very important to manually verify** within the design module, that the prosthesis meets all of the glass block manufacturer's minimum wall thickness values for the indications as given below. A short description how this works is listed below.

- **Abutment angle limitation for Wax-up abutments:**
  Ensure that the angle of the principle axis of the Wax-up abutment does not exceed 30°.

- **Local milling – Material dependency:**
  <u>Only use</u> material and variobase/stock-abutment combinations that are approved in your country.
  Ensure that the recommended minimum wallthickness are used, always read the material manufacturer's IFU.

2.1.6 Centralized Milling Recommended Thicknesses

To ensure that these values are met, they must be **manually set** and confirmed within the 3Shape software **design mode** as described below:
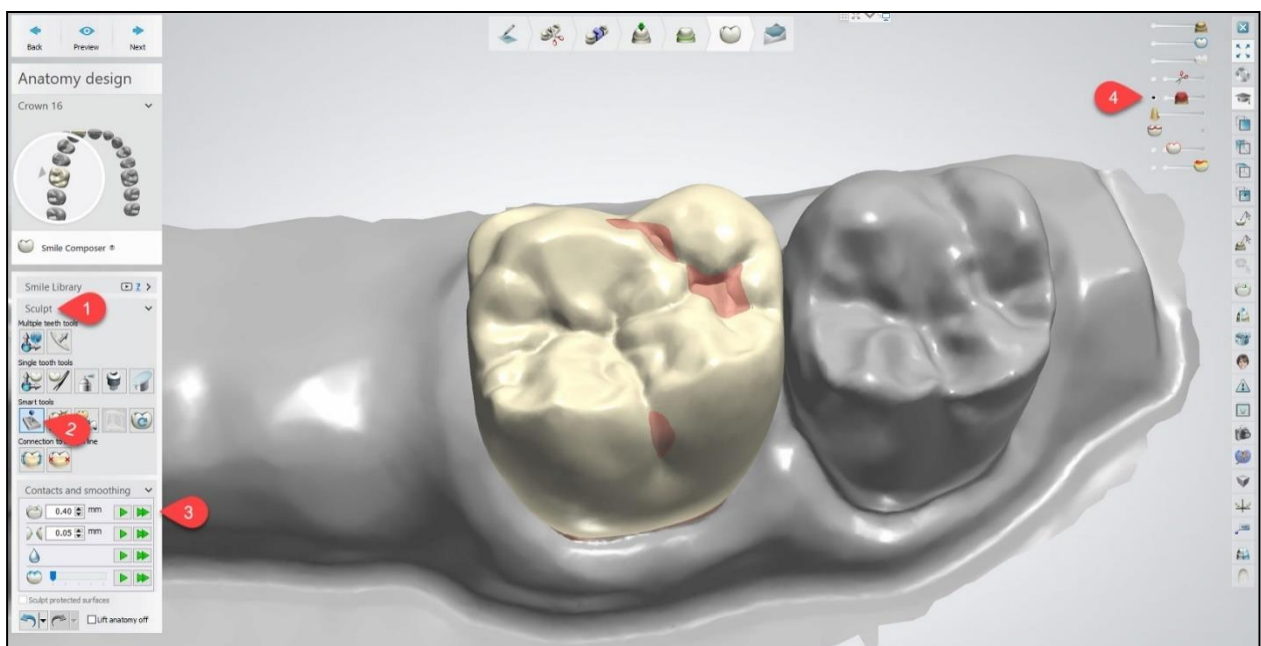
(1) Go forward to the "Sculpt" design mode
(2) In the Section "Smart Tools" click on "Contacts and smoothing"
(3) Check or enter the wall thickness value for your material – indication combination according to the upper table and run the test with the green marked confirmation button.
(4) The wall thickness can also be checked with the "Thickness map" button at the upper right.

After the wall thickness check is successfully done you can proceed as usual.

Table 1 shows the Straumann minimum manufacturing limits.

The indications cannot be manufactured with wall thicknesses thinner than these.

Straumann minimum manufacturing limits for Glass Ceramics on a tooth

Indication / Material	Crown	Veneer	Inlay / Onlay
IPS e.max	1,0 mm	0,6 mm	1,0 mm
Straumann n!ce	1,0 mm	0,6 mm	1,0 mm

Table 1 Straumann minimum manufacturing limits

Table 2 shows the Straumann required minimum wall thickness for glass ceramic on two-piece abutments (Ti-base).

Indication / Material	Abutment (Ti-Base) (NC, NNC)	Abutment (Ti-Base) (RC, RN, WN)	Abutment (Ti-Base) Medentika and Neodent Interfaces	Ceramic Implant - Monotype
IPS e.max	0,7 mm	0,9 mm	0,9 mm	0,9 mm
Straumann n!ce	1,0 mm	1,0 mm	1,0 mm	1,0 mm

Table 2 Minimum required wall thickness for two-piece abutments

Straumann Cementable (Stock) Abutments

Table 3 shows the Straumann required minimum wall thickness for glass ceramic Straumann Cementable abutments

Indication / Material	Cementable Abutment (NC, RC, RN, WN)
IPS e.max	0,9 mm
Straumann n!ce	1,0 mm

Table 3 Minimum required wall thickness for cementable abutments

Cautions when using Straumann Cementable (Stock) Abutments:
- The maximum allowed inter-implant angulation for a bridge is 8°
- In bridges ensure that you leave a thicker margin on the crown over the cementable abutment
- Only crowns and bridges without screw-channels can be produced.
- Do not mix the Straumann Stock abutment interfaces with other Ti-base interfaces in one bridge.

Please Note:
In some versions of 3Shape the button picture is marked "Veneer/Onlay" – this should only be used for veneers.

The Inlay button in these 3Shape versions can also be used for "Onlay" indications (Partial Crowns are also handled as the Inlay/Onlay indication).

2.1.7 In-house Milling Recommended Thicknesses
   - for n!ce and Pre-milled Abutments by Straumann -

Pre-milled Abutment blank values and rules:

- The abutment thickness should not be less than 0.4 mm (screw hole to outer abutment surface).
- The maximum angulation should not exceed 30°.
- The prostheses produced from a Straumann® Pre-milled Abutment Blanks should be rounded occlusally and sharp edges should be avoided

N!ce glass ceramic recommended values

Indication Material	Abutment (Ti-Base) (NC, NNC)	Abutment (Ti-Base) (RC, RN, WN)
Straumann n!ce	1,0 mm	1,0 mm

Table 4 Minimum required wall thickness for two-piece abutments

3 Terms and Conditions (AGB) for Straumann Products

Practitioners must have appropriate knowledge and instruction in the handling of the Straumann products for using them safely and properly in accordance with their instructions for use. It is the practitioner's responsibility to use the device in accordance with the instructions for use and to determine, if the device fits to the individual patient situation.

The Straumann Product is part of an overall concept and must be used only in conjunction with the corresponding original components and instruments distributed by Institut Straumann AG, its ultimate parent company and all affiliates or subsidiaries of such parent company ("Straumann"), except if stated otherwise in the instructions for use. If use of products made by third parties is not recommended by Straumann in the instructions for use, any such use will void any warranty or other obligation, expressed or implied, of Straumann.

Links to Detailed Terms and Conditions (to be read before ordering):
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